



# COM-652

## COM Express Motherboard

### KEY FEATURES



- Intel® 8th Gen (Whiskey Lake-U) Core™ Processors
- 2 x 260-pin SO-DIMM up to 32GB DDR4 2400 MHz (16GB per DIMM)
- 8 x PCIe x1 (Gen3), 4 x USB 3.2 Gen1, 8 x USB 2.0, 3 x SATA3
- 1 x Intel Gigabit LAN
- Supports Triple Display, 2x DDI, 1 x VGA, 1 x LVDS or eDP (optional)
- TPM 2.0 onboard IC (optional)
- Supports Intel® vPro, AMT (For i7/i5 SKU), RAID 0/1
- ATX: 12V±5%/5Vsb±5%
- AT: 12V±5%

### SPECIFICATIONS

#### Form Factor

Dimensions	COM Express Type6 (3.74-in x 3.74-in x 0.52-in, 9.5 cm x 9.5 cm x 1.3 cm)
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#### Processor System

CPU	COM Express Compact Size Type 6 Module with Intel® 8th Gen (Whiskey Lake-U) Core™ Processors -COM-652P (i7-8665UE, QC, 1.7GHz, 15 W) -COM-652M (i5-8365UE, QC, 1.6GHz, 15 W) -COM-652V (i3-8145UE, DC, 2.2GHz, 15 W)
Chipset	SoC
Socket	BGA1528
BIOS	AMI SPI 128 Mbit

#### Memory

Technology	Dual Channel DDR4 2400 MHz
Capacity	32 GB (16 GB per DIMM)
Socket	2 x 260-pin SO-DIMM

#### Graphics

Controller	Intel® Gen9 Graphics DX 11/12
HDMI	HDMI 1.4b Max resolution up to 4096x2160p 24Hz
DisplayPort	DisplayPort 1.2, DP++ Max resolution up to 4096x2160@60Hz
VGA	Max resolution up to 1920x1200@60Hz
LVDS	Dual channel 24 bit up to 1920x1200@60Hz
eDP	eDP 1.4 Max resolution up to 3840 x 2160@60Hz(optional)
MultiDisplay	Triple Display

#### Expansion

PCIe	8 x PCIe x1 (Gen3)
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#### Ethernet

Controller/ Speed	COM-652P/COM-652M: 1 x Intel® I219LM with 10/100/1000 Mbps, supports AMT/vPro COM-652V: 1 x Intel® I219V with 10/100/1000 Mbps
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#### I/O

HDMI	DDI1 support HDMI/DP or VGA (optional)
DisplayPort	DDI2 support HDMI/DP
USB	4 x USB 3.1 Gen1, 8 x USB 2.0
VGA	1
LVDS	1 (optional)
eDP	1 (optional)
TPM	TPM 2.0 onboard IC (optional)
GPIO	4 x GPI, 4 x GPO
Ethernet	1

#### Storage

SATA	3 x SATA3 (6Gb/s)
RAID	Intel® SATA RAID 0/1
eMMC	32GB (Optional)

#### Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

#### Power Requirements

Input PWR	ATX: 12V±5%/5Vsb±5% AT: 12V±5%
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

#### Environment

Operating Temp	0°C - 60°C
Storage Temp	-40°C - 85°C
Operating Humidity	5% - 90%
Storage Humidity	5% - 90%

## Assured Systems

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